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Canada

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**D4776-3****Job Sheet 198579****Part No:** D4776-3**Job Qty:** 40 pcs**Part Name:** Skidtube Clevis**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 7/31/19**Job Tracking No:****Due Date:** 9/9/19**Created By:** Marie Lajeunesse**Type:** Stock**Description:**

**Note:** DWG D4776 REV:E IPP REV A: NEW ISSUE JFS 13/03/07 VERIFY BY: JLM IPP REV:B 13.09.26 AS PER REV.B DD VERF:JLM IPP REV:C AS PER REV. PC1 JFS 13/11/07 VERIFY BY: JLM

**Ship Via:****Bill of Materials****Job Routing**

| Op No | Operation         | Qty       | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off      |
|-------|-------------------|-----------|------------|----------|-----------|---------|-----------------------|-----------|---------------|
|       |                   |           |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |               |
| 100   | Bandsaw - 1       | 40<br>pcs | 9/9/19     |          | 0.00      | 0.72    | Bandsaw - 1           |           | mm L 18/08/17 |
| 110   | HAAS 4 Axis - B4B | 40<br>pcs | 9/9/19     |          | 0.26      | 34.78   | HAAS - 1 - B4B        |           | VHS 19/9/26   |
|       |                   |           |            |          |           |         | HAAS - 2 - B4B        |           |               |
|       |                   |           |            |          |           |         | HAAS - 3 - B4B        |           |               |
|       |                   |           |            |          |           |         | HAAS - 4 - B4B        |           |               |
| 120   | QC 2              | 40<br>pcs | 9/9/19     |          | 0.00      | 0.00    | QC 2 - 1              |           |               |
|       |                   |           |            |          |           |         | QC 2 - 12             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 14             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 17             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 19             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 2              |           |               |
|       |                   |           |            |          |           |         | QC 2 - 20             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 22             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 23             |           | VHS 19/9/26   |
|       |                   |           |            |          |           |         | QC 2 - 25             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 32             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 33             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 35             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 39             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 4              |           |               |
|       |                   |           |            |          |           |         | QC 2 - 40             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 44             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 45             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 48             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 49             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 50             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 51             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 52             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 57             |           |               |
|       |                   |           |            |          |           |         | QC 2 - 62             |           |               |

**Container No:** S214182**Part:** D4776-3**Job No:** 198579**Serial No/Batch:** S214182**Revision:** E**Inspector:****Exp Date:****Instructions:** Various STC's

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Date: 09/17/19

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|                                   |           |        |           |                           |               |
|-----------------------------------|-----------|--------|-----------|---------------------------|---------------|
| 130 QC 8                          | 40<br>pcs | 9/9/19 | 0.00 0.00 | QC 2 - 63                 |               |
|                                   |           |        |           | QC 2 - 8                  |               |
|                                   |           |        |           | QC 2 - 66                 |               |
|                                   |           |        |           | QC 2 - 64                 |               |
|                                   |           |        |           | QC 2 - 65                 |               |
|                                   |           |        |           | QC 2 - 5                  |               |
|                                   |           |        |           | QC 2 - 71                 |               |
|                                   |           |        |           | QC 2 - 73                 |               |
|                                   |           |        |           | QC 2 - 69                 |               |
|                                   |           |        |           | QC 8 - 12                 |               |
|                                   |           |        |           | QC 8 - 14                 |               |
|                                   |           |        |           | QC 8 - 17                 |               |
|                                   |           |        |           | QC 8 - 20                 |               |
|                                   |           |        |           | QC 8 - 25                 |               |
|                                   |           |        |           | QC 8 - 3                  |               |
|                                   |           |        |           | QC 8 - 32                 |               |
|                                   |           |        |           | QC 8 - 33                 |               |
| 140 Handfinish - 1-1 Chemical-B4B | 40<br>pcs | 9/9/19 | 0.00 1.06 | QC 8 - 35                 |               |
|                                   |           |        |           | QC 8 - 39                 |               |
|                                   |           |        |           | QC 8 - 4                  |               |
|                                   |           |        |           | QC 8 - 44                 |               |
|                                   |           |        |           | QC 8 - 45                 |               |
|                                   |           |        |           | QC 8 - 49                 | none 19/09/26 |
|                                   |           |        |           | QC 8 - 58                 |               |
|                                   |           |        |           | QC 8 - 8                  |               |
|                                   |           |        |           | QC 8 - 9                  |               |
|                                   |           |        |           | QC 8 - 68                 |               |
|                                   |           |        |           | QC 8 - 67                 |               |
|                                   |           |        |           | QC 8 - 1 (A)              |               |
|                                   |           |        |           | QC 8 - 47                 |               |
|                                   |           |        |           | QC 8 - 40                 |               |
|                                   |           |        |           | QC 8 - 52                 |               |
|                                   |           |        |           | QC 8 - 23                 |               |
|                                   |           |        |           | QC 8 - 57                 |               |
|                                   |           |        |           | Handfinish - 1 - 1 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 2 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 3 - B4B  | SEP 27 2019   |
|                                   |           |        |           | Handfinish - 1 - 4 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 5 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 6 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 7 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 8 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 9 - B4B  |               |
|                                   |           |        |           | Handfinish - 1 - 10 - B4B |               |
|                                   |           |        |           | Handfinish - 1 - 11 - B4B |               |
|                                   |           |        |           | Handfinish - 1 - 12 - B4B |               |
|                                   |           |        |           | Handfinish - 1 - 13 - B4B |               |
|                                   |           |        |           | Handfinish - 1 - 14 - B4B |               |

|                                     |        |        |      |      |  |                           |  |
|-------------------------------------|--------|--------|------|------|--|---------------------------|--|
|                                     |        |        |      |      |  | Handfinish - 1 - 15 - B4B |  |
|                                     |        |        |      |      |  | Handfinish - 1 - 16 - B4B |  |
|                                     |        |        |      |      |  | Handfinish - 1 - 17 - B4B |  |
|                                     |        |        |      |      |  | Handfinish - 1 - 18 - B4B |  |
|                                     |        |        |      |      |  | Handfinish - 1 - 19 - B4B |  |
|                                     |        |        |      |      |  | Handfinish - 1 - 20 - B4B |  |
|                                     |        |        |      |      |  | Handfinish - 1 - 21 - B4B |  |
|                                     |        |        |      |      |  | Handfinish - 1 - 22 - B4B |  |
| 150 QC 7                            | 40 pcs | 9/9/19 | 0.00 | 0.00 |  | QC 7 - 10                 |  |
|                                     |        |        |      |      |  | QC 7 - 13                 |  |
|                                     |        |        |      |      |  | QC 7 - 14                 |  |
|                                     |        |        |      |      |  | QC 7 - 15                 |  |
|                                     |        |        |      |      |  | QC 7 - 17                 |  |
|                                     |        |        |      |      |  | QC 7 - 18                 |  |
|                                     |        |        |      |      |  | QC 7 - 19                 |  |
|                                     |        |        |      |      |  | QC 7 - 2                  |  |
|                                     |        |        |      |      |  | QC 7 - 28                 |  |
|                                     |        |        |      |      |  | QC 7 - 3                  |  |
|                                     |        |        |      |      |  | QC 7 - 30                 |  |
|                                     |        |        |      |      |  | QC 7 - 34                 |  |
|                                     |        |        |      |      |  | QC 7 - 36                 |  |
|                                     |        |        |      |      |  | QC 7 - 37                 |  |
|                                     |        |        |      |      |  | QC 7 - 41                 |  |
|                                     |        |        |      |      |  | QC 7 - 47                 |  |
|                                     |        |        |      |      |  | QC 7 - 48                 |  |
|                                     |        |        |      |      |  | QC 7 - 51                 |  |
|                                     |        |        |      |      |  | QC 7 - 58                 |  |
|                                     |        |        |      |      |  | QC 7 - 59                 |  |
|                                     |        |        |      |      |  | QC 7 - 60                 |  |
|                                     |        |        |      |      |  | QC 7 - 9                  |  |
|                                     |        |        |      |      |  | QC 7 - 68                 |  |
|                                     |        |        |      |      |  | QC 7 - 50                 |  |
|                                     |        |        |      |      |  | QC 7 - 67                 |  |
|                                     |        |        |      |      |  | QC 7 - 40                 |  |
|                                     |        |        |      |      |  | QC 7 - 24                 |  |
|                                     |        |        |      |      |  | QC 7 - 43                 |  |
|                                     |        |        |      |      |  | QC 7 - 61                 |  |
|                                     |        |        |      |      |  | QC 7 - 81                 |  |
| 160 Powdercoat - 1 White Gl(A)- B4B | 40 pcs | 9/9/19 | 0.00 | 0.49 |  | Powdercoat - 1 - B4B      |  |
|                                     |        |        |      |      |  | Powdercoat - 2 - B4B      |  |
|                                     |        |        |      |      |  | Powdercoat - 3 - B4B      |  |
|                                     |        |        |      |      |  | Powdercoat - 4 - B4B      |  |
| 170 QC 3                            | 40 pcs | 9/9/19 | 0.00 | 0.00 |  | QC 3 - 10                 |  |
|                                     |        |        |      |      |  | QC 3 - 13                 |  |
|                                     |        |        |      |      |  | QC 3 - 15                 |  |
|                                     |        |        |      |      |  | QC 3 - 17                 |  |
|                                     |        |        |      |      |  | QC 3 - 18                 |  |
|                                     |        |        |      |      |  | QC 3 - 2                  |  |
|                                     |        |        |      |      |  | QC 3 - 28                 |  |
|                                     |        |        |      |      |  | QC 3 - 3                  |  |
|                                     |        |        |      |      |  | QC 3 - 30                 |  |
|                                     |        |        |      |      |  | QC 3 - 34                 |  |

DL 19-9-30

DL 19-9-30

|     |                             |           |        |           |                        |                   |
|-----|-----------------------------|-----------|--------|-----------|------------------------|-------------------|
|     |                             |           |        |           | QC 3 - 36              |                   |
|     |                             |           |        |           | QC 3 - 41              |                   |
|     |                             |           |        |           | QC 3 - 51              |                   |
|     |                             |           |        |           | QC 3 - 58              |                   |
|     |                             |           |        |           | QC 3 - 59              |                   |
|     |                             |           |        |           | QC 3 - 68              |                   |
|     |                             |           |        |           | QC 3 - 9               |                   |
|     |                             |           |        |           | QC 3 - 40              |                   |
|     |                             |           |        |           | QC 3 - 19              |                   |
|     |                             |           |        |           | QC 3 - 43              |                   |
|     |                             |           |        |           | QC 3 - 24              |                   |
|     |                             |           |        |           | QC 3 - 61              | DAS<br>61<br>9-89 |
|     |                             |           |        |           | QC 3 - 81              |                   |
| 180 | Packaging 3-1 - Stock - B4B | 40<br>pcs | 9/9/19 | 0.00 0.00 | Packaging 3 - 1 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 2 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 3 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 4 - B4B  | DAS<br>74<br>9-89 |
|     |                             |           |        |           | Packaging 3 - 5 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 6 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 7 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 8 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 9 - B4B  |                   |
|     |                             |           |        |           | Packaging 3 - 10 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 11 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 12 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 13 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 14 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 15 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 16 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 17 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 18 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 19 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 20 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 21 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 22 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 23 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 24 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 25 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 26 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 27 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 28 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 29 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 30 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 31 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 32 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 33 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 34 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 35 - B4B |                   |
|     |                             |           |        |           | Packaging 3 - 36 - B4B |                   |
| 190 | QC 21 - SA                  | 40<br>pcs | 9/9/19 | 0.00 0.00 | QC 21 - SA - 21        | DAS<br>21<br>9-89 |
|     |                             |           |        |           | QC 21 - SA - 70        |                   |
|     |                             |           |        |           | QC 21 - SA - 53        |                   |

Part Op 100 - Cut Blank at 4.625"

Descriptions: 110 - 1-Machine per folio FB168 DWG REV: E FOLIO REV: E 2- deburr and break all sharp edges

120 - (QC2- Inspect parts off machine FAI/FAIB)

130 - (QC8- Inspect parts - second check)

140 - (Chemical Conversion Coat per QSI005 4.1)

150 - (QC7-Inspect Chemical Conversion Coat)

160 - (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum) START TIME: 10:50 OVEN TEMPERATURE: 300°FINISH TIME: 1:20 m 143459

170 - (QC3- Inspect Part Finish)

180 - (Identify as per dwg &amp; Stock Location: \_\_\_\_\_)

190 - (QC21- Final inspection - Work Order Release)

MAT  
used

## Job BOM

14x 519 54 68

5-75'

| Part / Item         | Component Name          | Quantity             | Operation       | Container |
|---------------------|-------------------------|----------------------|-----------------|-----------|
| M6061T6B1.500X2.500 | 6061-T6 Bar 1.50 X 2.50 | 15,4400 ft (.386 ea) | 100-Bandsaw - 1 | 5207687   |

10-129

## Job Allocations

| Operation       | Component Part      | Required | Inventory | Allocated |
|-----------------|---------------------|----------|-----------|-----------|
| 100-Bandsaw - 1 | M6061T6B1.500X2.500 | 15       | 16        | 0         |

| Part Specifications |                 |                                |                |          |                  |
|---------------------|-----------------|--------------------------------|----------------|----------|------------------|
| Spec No             | Description     | Target/Tolerance               | Limits         | Type     | Special Comments |
| 1                   | Skidtube Clevis | 4.430Inches ± 0.030            | 4.460<br>4.400 |          | 4,429            |
| 2                   | Skidtube Clevis | 2.300Inches ± 0.030            | 2.330<br>2.270 |          | 2,300            |
| 3                   | Skidtube Clevis | 1.778Inches ± 0.010            | 1.788<br>1.768 |          | 1,776            |
| 4                   | Skidtube Clevis | 0.880Inches ± 0.030            | 0.910<br>0.850 |          | ,876             |
| 5                   | Skidtube Clevis | 0.510Inches + 0.010<br>- 0.000 | 0.520<br>0.510 |          | ,511             |
| 6                   | Skidtube Clevis | 1.063Inches ± 0.010            | 1.073<br>1.053 |          | 1,064            |
| 7                   | Skidtube Clevis | 1.380Inches ± 0.030            | 1.410<br>1.350 |          | 1,375            |
| 8                   | Skidtube Clevis | 0.190Inches ± 0.030            | 0.220<br>0.160 |          | ,187             |
| 9                   | Skidtube Clevis | 0.100Inches ± 0.010            | 0.110<br>0.090 |          | ,099             |
| 10                  | Skidtube Clevis | 0.484Inches + 0.006<br>- 0.001 | 0.490<br>0.483 | Diameter | ,485             |
| 11                  | Skidtube Clevis | 0.500Inches ± 0.030            | 0.530<br>0.470 |          | ,500             |
| 12                  | Skidtube Clevis | 0.640Inches ± 0.030            | 0.670<br>0.610 |          | ,639             |
| 13                  | Skidtube Clevis | 3.150Inches ± 0.010            | 3.160<br>3.140 |          | 2,180            |
| 14                  | Skidtube Clevis | 1.080Inches ± 0.010            | 1.090<br>1.070 |          | 1,080            |
| 15                  | Skidtube Clevis | 0.688Inches ± 0.010            | 0.698<br>0.678 |          | 0,691            |
| 16                  | Skidtube Clevis | 0.397Inches + 0.006<br>- 0.001 | 0.403<br>0.396 | Diameter | ,397             |
| 17                  | Skidtube Clevis | 1.863Inches ± 0.010            | 1.873<br>1.853 |          | 1,858            |
| 18                  | Skidtube Clevis | 0.190Inches ± 0.030            | 0.220<br>0.160 | Radius   | ,185             |
| 19                  | Skidtube Clevis | 0.130Inches ± 0.030            | 0.160<br>0.100 | Radius   | ,130             |
| 20                  | Skidtube Clevis | 0.440Inches ± 0.030            | 0.470<br>0.410 | Radius   | ,440             |
| 21                  | Skidtube Clevis | 0.125Inches ± 0.010            | 0.135<br>0.115 |          | ,123             |
| 24                  | Skidtube Clevis | 0.250Inches ± 0.030            | 0.280<br>0.220 | Radius   | ,250             |
| 25                  | Skidtube Clevis | 1.050Inches ± 0.030            | 1.080<br>1.020 | Product  | 1,050            |
| 26                  | Skidtube Clevis | 1.430 ± 0.030                  |                |          | 1,424            |
| 27                  | Skidtube Clevis | 1.130Inches ± 0.030            | 1.160<br>1.100 | Product  | 1,135            |
| 28                  | Skidtube Clevis | 0.060 ± 0.030                  |                | Product  | ,060             |
| 29                  | Skidtube Clevis | 0.810Inches ± 0.030            | 0.840<br>0.780 | Product  | ,790             |
| 30                  | Skidtube Clevis | 0.060 ± 0.030                  |                | Product  | ,060             |
| 31                  | Skidtube Clevis | 0.183Inches ± 0.010            | 0.193<br>0.173 | Product  | ,182             |

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Entered: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only

NCR No. \_\_\_\_\_

Job: \_\_\_\_\_

Part No. \_\_\_\_\_

### DISPOSITION

Rework ☐  
Scrap ☐  
Use-as-is ☐

### DEPARTMENT/PROCESS

Skid-tube ☐  
Machining ☐  
Large Fab ☐

Cross tube ☐  
Small Fab ☐  
Finishing ☐

Eng. (Non-AW) ☐  
Prod. Eng. Coord. ☐  
Rec/Store/Packaging ☐  
Engineering ☐  
Water Jet ☐  
Supplier ☐  
Quality ☐

Date: \_\_\_\_\_

Sequence #: \_\_\_\_\_

QTY Affected: \_\_\_\_\_

MRB (QSI042)

### Description Work Order Deviation

### Disposition

Completed By

Lead hand / Supervisor

QC / QA Coordinator

### Root Cause

Operator ☐  
Manufacturing Process ☐  
Equip/Tooling ☐  
Handling/Preservation ☐  
Material ☐  
Product Improvement ☐  
Process Improvement ☐  
Human Factors ☐

### FAULT CATEGORY

Pressure/Forced ☐  
Bending ☐  
Crushing ☐  
Cracks ☐  
Crimp/Kink/Ripple/Wave/Twist ☐  
Marks/Chatter ☐  
Mislabeled ☐  
Contamination ☐  
Misaligned/off center ☐  
BOM/Route ☐  
Broken/Damage/Defect ☐  
Incomplete/Unclear Instructions ☐  
Drill Holes ☐  
Fit/Function ☐

Power Loss/Surge ☐  
Folio/Program ☐  
Grain Direction ☐  
Weld ☐  
Wrong Stock Pulled ☐  
Out of Sequence ☐  
Off-set/Set-up ☐

Positioned Wrong ☐  
Outside Tolerance ☐  
Drawing ☐  
Finish ☐  
Part Lost/Missing ☐  
Misread ☐

Other/Details: \_\_\_\_\_